

PLANNING AHEAD

Notes for the Planning and Policy Community

Volume 5, Issue 9

November-December 2002

In This Issue

Vacancy Announcements.....	2
Temporary Assignment – IWR.....	3
The Corps Stands for Value to the Nation	4
Beyond Expected Value	4
Updated Port Series Reports.....	5
Year of Clean Water Updates—National Water Quality Monitoring Day Events	6
Corporate Wetlands Restoration Partnership Expands to California.....	7
FY2003 Prospect Courses	8
NAD Economics Workshop.....	9
NWD Forms Regional Economic Technical Board	9
Maritime Trade and Transportation '02.....	10
Norfolk District Experiments on Chesapeake Bay Oyster Restoration.....	10
Instructions for Contributors to Planning Ahead	12
Subscribing to Planning Ahead	12
Submissions Deadline	12

(Ed. Note – We have inserted hyper links in the Table of Contents to allow you to jump to specific articles. To return to the Table of Contents, click on the [book icon](#).)

Vacancy Announcements


David Schmidt – CESAS-PD

Savannah District is both a Civil Works and Military District and has a diverse program that includes deep and shallow draft navigation, flood control, environmental restoration, hydropower, shore protection, and other Corps missions and functions. Its planning mission is growing and is in need of experienced economists and water resources planners. Savannah District will soon be announcing the following vacancies in Planning Division:

Economist, GS-0110-12: The Savannah District has initiated recruitment for a senior economist. This position is in the Economics and Special Programs Team, Plan Formulation and Economics Branch, Planning Division. The person selected will serve on assigned Project Delivery Teams and provide basic economic analyses such as annual costs, life cycle costs, benefit analysis, optimization, forecasts and statistical methods including risk and uncertainty analysis in support of the NED/NER plans.

Plan Formulation Specialist, Interdisciplinary GS-12: The Savannah District has initiated recruitment for two senior plan formulators. These positions are in the Plan Formulation Team, Plan Formulation and Economics Branch, Planning Division. The position will be an interdisciplinary GS-12 position with the following series/titles: GS-0020, Community Planner; GS-0110-Economist; GS-0408 Ecologist; GS-0810 Civil Engineer; GS-0807, Landscape Architect; GS-819 Environmental Engineer; GS-1301 Water Resources Planner; GS-0193 Archeologist; GS-0401, Biologist. The persons selected will serve on assigned Project Delivery Teams and identify water and related land resources problems and opportunities, develop study specific planning objectives and constraints, formulate and evaluate alternatives, concepts and solutions to include the NED/NER plans.

The city of Savannah was founded near the mouth of the Savannah River in 1733. The past isn't really over, especially here in Savannah where it is inextricably entwined with the city's present and future. General James Oglethorpe had the honor of laying out the city plan, organizing it into the now-famous arrangement of squares. Today 19 of the 24 original squares stand in restored glory. They are celebrated in brochures and visitor's memory alike as one of the most beautiful sights in Savannah. Savannah is blessed with ancient oak trees dripping with Spanish moss. It is accented with historic homes and underlain with cobblestones straight off the ships that, long ago, sailed into Savannah's port. It has azaleas in springtime and horse-drawn carriages to guide visitors around the Historic and Victorian Districts. The city has a mild climate with temperatures averaging 40 to 60 degrees in the winter and 72 to 92 degrees in the summer. The mean annual precipitation is 49 inches. For additional information on the city, go to: <http://www.savannahnow.com/cityguide/wondering/wondering.shtml>

If you are interested in these positions, be sure to provide your Resumix information to the eastern South Central Civilian Personnel Operations Center (SCCPOC). For additional information on these vacancies, please contact our CPAC specialist, Ms. Nancy Mitchell at 912-652-5003. 

Temporary Assignment -- IWR

Dan Sulzer – CESPL-PD-E


I am a Senior Regional Economist and Team Leader of the Economics Group in the Los Angeles District. I have just had the benefit of a six-month temporary assignment at the Institute for Water Resources in Fort Belvoir, Virginia. I worked part time in Decision Methodologies for Ken Orth and part time in Navigation for Dave Moser. Such assignments are a great growth opportunity for anyone looking to branch out and expand their knowledge in economics or any other Planning discipline.

I think what makes such an assignment so beneficial for the Corps is that the District benefits from IWR knowledge by getting a little more up-to-date exposure, as I can directly feed information to the District as it happens. Additionally, IWR benefits by hearing and adjusting to many of the new budgetary and logistics challenges Districts face.

It is vital that all areas of the Corps exchange ideas and facilitate cross communication to ensure that the Corps is able to adapt to today's changing environment. It is also very important that Corps employees work in a different area to increase overall knowledge of Corps activities, and see how we can better meet the public needs.

In the six months at IWR I was involved in (but not limited to) the following activities:

1. A contract for a Travel Cost Primer/Reader that may be important District guidance for detailed recreation analysis and possible future environmental output analysis.
2. Dam Safety and Major Rehab Guidance for the Navigation Group.
3. Assisting in the survey of flood-prone areas in the St Paul District.
4. Participating in the Coastal Damage Workshop.
5. Participating in a review conference in October for a flood control study (The Seven Levees Study) in the Kansas City District.
6. Managed the search for meeting rooms called "fusion centers" in the Washington and Virginia area.
7. Working on various issues regarding the monetization of environmental outputs.

This assignment made me realize that staying in one position for a long period of time (in my case 14 years) can make you a little too "comfortable". While comfort is not a bad thing, I think it is important to venture outside your comfort zone from time to time to see what's out there. One often finds that there are a lot of great career opportunities that you may have never thought existed. It also enables you to diversify your thinking – and with today's atmosphere, that's a good thing. Give me a call or e-mail if you want to find out more. Daniel.E.Sulzer@spl01.usace.army.mil (213) 452-381 


The Corps Stands for Value to the Nation

John Singley CEIWR-PA

LTG Flowers has asked that each of us have a 30-second message ready that simply and clearly describes who we are and what we do in the Corps. The Chief himself has asked many to recite their “elevator speech” – usually at a Town Hall or other Corps gathering. His intent of course is that all of us be prepared to tell our part of the Corps story at every opportunity. Each of our stories is important, but what about the rest of the Corps story? Where can we go, and send others, to get a clear and simple description of what the Corps does and why it matters?

The Institute for Water Resources has launched the Value to the Nation communication initiative to help answer this need for clear and simple messages about the Civil Works programs of the Corps. You can go to the Value to the Nation website right now if you wish. It’s at www.CorpsResults.us. The VTN website is live and ready to be shared at every opportunity with everyone who may be interested in our Value to the Nation. It’s the Corps “elevator speech” for Civil Works.

The VTN initiative also includes brochures for major Civil Works programs. Brochures are now available for 1) Environment, 2) Inland Navigation, 3) Floodplain Management, 4) Recreation, 5) Hydropower, 6) Lands and Waters Stewardship, and 7) Water Supply. By the end of the year, others will be added for 8) Deep Draft Navigation, 9) Emergency Management, and 10) the Regulatory Program. The published brochures are on the VTN website, and can be ordered from IWR publications (Arlene.J.Nurthen@usace.army.mil).

Each of us in Civil Works needs to understand our full Value to the Nation: individually, functionally, and corporately. The VTN initiative gives us an opportunity to learn more about who we are and what we do in the Corps, and gives us clear and simple messages about our Value to the Nation that we can share with our fellow Americans. If you have any questions or comments about the VTN initiative, please contact IWR at John.E.Singley@usace.army.mil or telephone 703-428-6219. 


Beyond Expected Value

Michael R. Walsh, CEWRC-IWR-DM

Risk analysis should be part of any planning effort. Corps regulations and guidance require risk analysis – risk assessment, risk communication, and risk management – to be an integral part of planning proposals. The results of a risk analysis include calculated averages (technically, expected value) of NED benefits and costs. Usually, the alternative plan with the highest expected value for net benefits is chosen as the preferred alternative. However, the expected value is a simple measure of the risk associated with the forecasted benefits and costs of each plan that says nothing about the range and likelihood of possible values. Plan A may have greater expected net benefits than Plan B but have a wide distribution of possible outcomes –possibly higher, but also possibly lower, net benefits. How can one make a good decision about Plan A and Plan B taking into account all the relevant measures of risk? That fundamental question is explored in a recent IWR report entitled, [Beyond Expected Value: Making Decisions Under Risk and Uncertainty](#), IWR Report 02-R-4, September 2002.

The report examines the basic techniques of risk analysis and the various ways to quantify risk. A key to understanding and communicating risk to decision-makers is visualization. The report shows how to display risk measures so they are understandable to all interested parties. Several approaches for


decision-making using risk are discussed and the report ends with a detailed example showing how to incorporate risk into a multiple criteria decision-making (MCDM) framework. MCDM is well suited for incorporating risk into the decision-making process.

This report is thought provoking for anyone who has struggled with adding risk information into decisions. Please direct any comments or questions to [Michael R. Walsh](#) at IWR. 

Updated Port Series Reports

Ginny Pankow – CEIWR-NDC-N

The Navigation Data Center (NDC) has recently distributed a revised edition of Port Series No. 20 Port of New Orleans, Louisiana, which supersedes the report, published in 1990. The report contains information on 315 facilities located on the Mississippi River in the parishes of St. Bernard, Orleans (City of New Orleans), and Jefferson, the Inner Harbor Navigation (Industrial) Canal, the Mississippi River Gulf Outlet (MRGO), Michoud Harbor and Canal, Bayou Sauvage, Bayou Bienvenue, Bourros Pit, Harvey Canal, Algiers Canal, Bayou Barataria, Bayou Bonfuca, Tchefuncta River, Lake Pontchartrain, and Port Manchac. The printed report containing general location information, facility photographs, facility details, summary tables, index, and aerial photographic maps of the waterfront area are available from NDC. Summary information and data files for New Orleans are available on the NDC homepage at <http://www.iwr.usace.army.mil/ndc/ports/ps/psbooks.htm> and on the NDC U.S. Waterway Data CD. Information contained in Port Series No. 20A Mississippi River Ports Above and Below New Orleans is combined with the homepage listing of PS 20 and will be updated pending final review. Reports and the free CD can be ordered at the above web site. Further information about the reports and the information they contain should be directed to Sidney Formal (702-428-6380) or Ginny Pankow (703-428-9047).

The Navigation Data Center (NDC) has recently distributed revised editions of Port Series No. 36 Port of Seattle, Washington and Port Series No. 68 Ports on the Arkansas, Red, and Ouachita River Systems, and Missouri River. These supersede reports published in 1993 and 1987. The Seattle report includes information for 194 facilities, in the Outer Harbor (Elliott Bay, East Waterway, West Waterway, and the Duwamish Waterway), the Inner Harbor (Salmon Bay, Lake Washington Ship Canal, Lake Union, Portage Bay and Lake Washington), and Puget Sound (Shilshole Bay, Point Wells, Edwards Point and Edmond). The Arkansas, Red, Ouachita and Missouri River report is divided into two sections, the first contains 128 facilities located in the ports on the Arkansas, Red and Ouachita River systems, including the lower approaches; the McClellan-Kerr Arkansas River Navigation System (Arkansas and Verdigris Rivers); and the White River. The Missouri river section contains information on 88 facilities located on the right and left banks of the river. Printed reports containing general location information, facility photographs, facility details, summary tables, index and aerial photographic maps of the waterfront area are available from NDC. Summary information and data files are available on the NDC homepage at <http://www.iwr.usace.army.mil/ndc/psbooks.htm>, and on the NDC U.S. Waterway Data CD. Reports and the free CD can be ordered at the above web site. Further information about the reports and the information they contain should be directed to Sidney Formal (702-428-6380) or Ginny Pankow (703-428-9047). 

Year of Clean Water Updates—National Water Quality Monitoring Day Events

Beverley B. Getzen, CECW-PD

Presidential Proclamation: The [Proclamation](#) by the President of the United States of America, marking the 30th Anniversary of the Clean Water Act, declares the year beginning 18 October 2002 as the Year of Clean Water, 2002-2003.

Maj. Gen. Hans Van Winkle, USACE Deputy Commanding General, got into the spirit of the Year of Clean Water when he spoke to more than 300 students at the National Youth Watershed Summit in Washington, D.C., on Oct. 9. He discussed the importance of finding solutions that will keep the nation's water resources safe from contamination and misuse, and the need to make a commitment to clean water and environmental protection.

National Water Quality Monitoring Day: Dozens of activities sponsored by Corps of Engineers Districts and labs took place around the United States to commemorate the 30th anniversary of the Clean Water Act, including the inauguration of National Water Monitoring Day. The main purpose of this celebration is to take a snapshot view of streams, lakes, and coastal waters throughout the United States by inviting citizen monitors, established volunteer monitoring organizations, and representatives from federal, tribal, state and local agencies to evaluate water quality conditions within their local watersheds. Data collected by all participating monitors can be viewed at The Year of Clean Water [website](#). While the data collected probably will not undergo quality assurance and quality control procedures, they could be used to identify potential problem areas where states may need to do more monitoring. More importantly, these events, many of which will be repeated throughout the coming year, help to connect people to their watersheds.

A few of those events are summarized below:

Huntington District: Thirty 8th grade students from Our Lady of Fatima School helped the district to commemorate the 30th Anniversary of the National Clean Water Act by testing the water quality of the Ohio River at Harris Riverfront Park in Huntington (and at 50 other Corps sites in the District). Students took samples, tested them, and learned that the actions of individuals on a daily basis not only affects water quality locally, but can have impacts downstream.

Mobile District: This day provided a great venue for the Corps and the University of South Alabama to strengthen their partnership. The Mobile District staff conducted two workshops at the Oct. 19 "Expanding Your Horizons" conference sponsored by the USA Women in Science. Over 200 students from local middle schools took part in the seminar designed to encourage young women to pursue math and science-related careers. The district's volunteers guided 18 participants through collecting and testing water samples from the university's wetlands; their individual water sample test results contributed to a national database to be posted to the National Water Sampling Day website.

Little Rock District: The project offices at Lake Dardanelle and Mt. Home both participated in National Water Monitoring Day activities. Twenty members of a local scout troop, working with the Arkansas State Stream Team, conducted tests at the Bona Dea site at Lake Dardanelle, and a group of school children in the 6th & 7th grades at the Pinkston Middle School in Mt. Home, AR, conducted tests at three different sites at the Mt. Home reservoir.

ERDC, Vicksburg: In Vicksburg, Miss., students from four local high schools joined the U.S. Army Research and Development Center (ERDC) in a hands-on sampling exercise, testing water from various creeks, streams and lakes as well as the Yazoo River at the Vicksburg waterfront. The students saw firsthand that what they learn in the classrooms has real-life applications.

San Francisco District: The San Francisco District sponsored events for both young and old in two events at Lake Sonoma. School children learned about clean water as part of the school district's Health, Safety & Nutrition Fair while the adults actually tested the pond water at Lake Sonoma. On Oct. 19, at San Pedro Creek in Pacifica, Calif., members of the Explorer Post 333 collected data from four different monitoring points. The Explorer Scouts are co-sponsored by the district and Bechtel Corporation as part of the "Learning for Life" career education program.

Buffalo District: Juniors and seniors from a Buffalo area high school headed out to Onondaga Creek, a major tributary of Onondaga Lake in central New York, to learn how the quality of water in the tributary affects the quality of water in the lake and the entire watershed. Working with Buffalo District employees, the students learned how to take and read water samples. Several of the students then attended the Onondaga Lake Partnership Annual Progress Meeting on Nov. 13 to give a brief report on what they learned, saying also that they desired other similar hands-on learning opportunities. As a result, the Partnership, which includes the Buffalo District, is pursuing a continuing relationship with the school group.

Walla Walla District: More than 50 people participated in "Eyes on Indian Creek" activities sponsored by Albertson College of Idaho, the Idaho Department of Environmental Quality, the National Park Service Rivers and Trails program, the City of Caldwell and the Corps' Walla Walla District. District staff on the Indian Creek Ecosystem Restoration Feasibility team was the hosts. Participants looked at fish and bugs found in the creek and learned about water sampling techniques.

Ft. Worth District: The Fort Worth District sponsored water-sampling activities at Benbrook and Waco Lakes and Sam Rayburn Reservoir. In all three cases, students learned from their testing that the overall water quality was "generally good." The District plans for water quality monitoring to be an ongoing activity, with intensive water quality sampling programs at nine of its Texas lakes.

St. Louis District: Illinois and Missouri elementary, jr. high, and high school students participated in several days of activities, and were then awarded a St. Louis District Corps badge, "Junior Water Experts." Students learned how to sample water, were introduced to the Corps' Environmental Operating Principles, and participated in a "Drink at your own risk" demonstration that discussed and displayed different water pollutants. They even had an opportunity to drink "stuff" with bugs, snakes, trash and foam (which in reality were Kool-aid, lemonade and frappe).

[Beverley B. Getzen](#), CECW-PD, (202) 761-4489 

Corporate Wetlands Restoration Partnership Expands to California


Les Tong, CESPD-CM-P

The Corporate Wetlands Restoration Partnership (CWRP) that our sister Divisions in the East and Midwest have nurtured through the Coastal America program has made its way to California. The kick-off event in California for this public-private partnership was held on November 19, 2002, at the DOW

Chemical Company's wetland preserve – a 470-acre wetland property adjacent to a DOW manufacturing plant in Antioch, California. The event showcased the DOW preserve and its affiliations with U. C. Berkeley, the Lindsay Wildlife Museum, and local elementary schools. Over one hundred people from the public and private sectors and the local community attended the event. The keynote speaker was Christine Todd Whitman, Administrator of the U. S. Environmental Protection Agency. Speaking on behalf of the Coastal America partners, including the U. S. Army Corps of Engineers, she welcomed the start of the CWRP in California. The South Pacific Division Commander, Brigadier General Robert L. Davis, attended the event to demonstrate the interest and support of the U. S. Army Corps of Engineers in the regional partnership.

The National Corporate Wetlands Restoration Partnership was described by John Wright, NAD Environmental Team Leader, in the March 2000 issue of Planning Ahead [Vol. 3, Issue 3] and was further supported by CECW-PF memorandum of 31 May 2000, which noted the National CWRP signing ceremony on 25 May 2000.

“If the NCWRP succeeds in engaging the private corporate sector on a national scale, it could be an important potential tool that may allow you to develop community and watershed partners that are not now sufficiently funded to access our many programs.” [CECW-PF, 31 May 2000].

The South Pacific Division hopes that the CWRP in California succeeds in building a corporate support base, allowing the Corps of Engineers to tap another resource to support ecosystem restoration. Much more work must be accomplished to organize the partnership at the corporate level in California. The Southwest Regional Implementation Team of Coastal America is looking forward to engaging and coordinating with the CWRP advisory board after it is established. On another note, the annual [National Coastal America](#) retreat for 2003 is scheduled for San Diego, California, in early June 2003. 

FY2003 Prospect Courses

John Buckley -- HND

A wide variety of technical and professional development courses are available through the USACE Proponent Sponsored Engineer Corps Training (PROSPECT) Program. Information about the FY03 program can be found online at: <http://pdsc.usace.army.mil> under *Class Schedules*.

To enroll, discuss this with your supervisor and then contact your local training coordinator. Your training coordinator can guide you through the registration process and inform you of any deadlines applicable in your organization as well as all local procedures that you must follow to register. Among other items, you will need to have the DD Form 1556 completed and forwarded to the Registrar's Office of the USACE Professional Development Support Center (PDSC). If a course is full, you may request to be put on a waiting list and you will be informed when a space becomes available. PROSPECT courses are open primarily for Corps of Engineers personnel. Government personnel from other agencies (federal, state, or local), however, may take PROSPECT courses on a space available basis.

POC is John Buckley, John.P.Buckley@HND01.usace.army.mil. Telephone: 256-895-7431. 

NAD Economics Workshop

Gary Hershendorfer – NAD-CM-PP

An NAD Economics Workshop was held in New York City November 5-8, hosted by the New York District. In addition to economists representing four of the five NAD districts, economists were also invited and attended from SAD and Wilmington. Headquarters was represented and participated, as did IWR. The major items on the agenda were the conduct of evaluations for deep draft navigation, issues related to the proper evaluation of shoreline studies, and the application of economics in the conduct of environmentally oriented projects. Some of the highlights included presentations by Gary Hershendorfer, Economics Team Leader for NAD, who provided some explicit guidance and suggestions on how to conduct deep draft navigation benefit evaluations (copies available on request to Gary), Ian Mathis, who talked on the types of navigation-research currently being undertaken by IWR, and Harry Shoudy, who addressed the current state of developing benefits for shoreline projects. Also discussed jointly were the issues associated with undertaking environmental projects. The participation of Gerald Melton and Frank Reynolds greatly enhanced the scope and greatly contributed to the Workshop, which has become over the past five years an annual undertaking of NAD.

One outcome of the workshop is to consider establishing a division-wide senior-level economist board, similar to that established at NWD, to synergistically enhance the economics within the division.



Please see related article immediately below (*editor*).


NWD Forms Regional Economic Technical Board

Jim Fredericks -- NWD-CM-WPX

In recent years, there have been concerns expressed outside and inside the Corps about the quality of the economic analysis used to make recommendations for water resource development investments. As a result of these concerns and as a proactive effort the NWD Planning Board (consisting of the Chiefs of Planning at NWD, NWP, NWW, NWS, NWO, and NWK) conducted an evaluation of technical review processes within NWD. One result of this evaluation was the establishment of the Regional Economic Technical Board (RETB) in late September. The NWD RETB was formed to assure a robust improving economic capability across the Division and assure that all economic studies within NWD are performed using the best technical practices. The RETB is comprised of a senior level economist from each of the five Districts within NWD (Craig Newcomb, NWW; Jeanne Musgrave, NWK; Brian Shenk, NWP; Gene Sturm, NWO; Jim Smith, NWS; and Jim Fredericks from the Division office as the acting chairman).

Currently the RETB is moving out on four initiatives to improve economics within NWD. The 1st initiative is to develop a risk matrix to help NWD economists determine the appropriate level of independent technical review (ITR) based on project scope, controversy, complexity, potential impacts, visibility, cost, and other considerations. The 2nd initiative is to assess and augment economic capabilities within NWD. The objective is to identify approaches to meet existing and future workload requirements. The 3rd initiative is to review ITR procedures and recommend improvements. The 4th initiative requires NWD Districts to submit for selected projects their Quality Control Plans for RETB review. The RETB has conference calls every two weeks and plans to meet annually. The conference calls serve not only to advance the current initiatives, but also provide the economists an opportunity to exchange ideas and information on current study issues. This year's annual meeting will be held in conjunction with the NWD Planning Chiefs conference in Salt Lake City, December 3-4.

The RETB is also interested in supporting efforts to improve economic analysis around the nation. To the extent that HQ or IWR needs input from the field on policies or procedures related to economics, the RETB is available. The RETB will also be available for ITR on a reimbursable basis. It is anticipated that the RETB will conduct all technical reviews for economic studies completed for preauthorization and post authorization decision documents within NWD. Other technical boards for Plan Formulation and Environmental Resources are also being established to perform similar functions and are expected to be operating by mid-December.


For additional information, contact Jim Fredericks, CENWD-CM-WPX / (503) 808-3981. 

Maritime Trade and Transportation '02

Arlene Dietz – CEIWR-NDC

The Federal Maritime Data Group, led by the U.S. Department of Transportation's Bureau of Transportation Statistics, along with its members, including the Corps Navigation Data Center, has just released the **Maritime Trade and Transportation '02** report. This document updates the major trends in maritime trade, transportation, and shipbuilding, and includes special reports on the Saint Lawrence Seaway and on maritime transport and the environment.

Corps users will recognize that much of the data had been extracted from the Corps **Waterborne Commerce of the U.S., Waterborne Transportation Lines of the U.S., U.S. Waterway System — Transportation Facts**, NDC's internet site, and from special runs of NDC's databases. Other information came from a variety of sources including: Lloyds Maritime Information Services, Ship Particulars, and the Vessel Movement file; Clarkson Shipping Review and Outlook; MDS Transmodal; Containership Databank; Containerization International; Maritime Administration; U.S. Coast Guard; St. Lawrence Seaway Development Corporation; Journal of Commerce PIERS; Federal Highway Administration; Statistical Abstracts of the U.S.; Bureau of Economic Analysis; United Nations International Maritime Organization; and Bureau of Labor Statistics.

Copies of this 89 page report are available from the [Bureau of Transportation Statistics](#) Customer Service Office at 202-366-DATA or the Bureau's internet site. To discuss this you may contact Arlene Dietz at 703-428-7071. 

Norfolk District Experiments on Chesapeake Bay Oyster Restoration

David Schulte – CENAO-PM

The historic oyster population of Chesapeake Bay filtered the Bay's entire water volume in about three days. Today, the remnant oyster population filters this volume in about a year.

Norfolk District is working toward restoring the native oyster, *Crassostrea virginica*, the keystone species in the Chesapeake Bay. Due to over a century of overharvesting and habitat degradation, along with recent diseases, the native oyster population is at one percent of historic levels. This has had a negative impact on the entire ecology of the Chesapeake Bay. Restoring this species and its natural filtering capacity would provide great ecological benefits over the entire Bay, significantly

increasing water quality and clarity, and the volume and quality of all Bay commercial and recreational fisheries. If restored and then fished in a sustainable fashion, the native oyster might one day resume its position as the most valuable fishery in the Chesapeake Bay, providing income to thousands of workers in the seafood industry.

This project is a challenging task. Once the Norfolk District Planning team became aware of the difficulties facing oyster restoration, it seemed that sufficient National Ecosystem Restoration (NER) benefits to justify Federal interest were not possible. Norfolk planners had to come up with a restoration methodology more likely to succeed and provide greater NER benefits. Working in collaboration with a team of oyster scientists, the team developed a new strategy called the “genetic rehabilitation strategy” for the native oyster. This strategy will be the best chance for success, as it uses several lab-selected strains of native oyster that have some resistance, though not immunity, to the two diseases that have made oyster restoration so difficult. These oysters, the “CROSBreed” and “DEBY” strains, will be grown by the aquaculture industry for the district and planted on reef bases of oyster shell, or on other materials, such as limestone marl, which will be placed by the district. For seeding, the team proposed to use large “cultchless” broodstock oysters, which are reproductively mature oysters not attached to any shell or other material.

The advantages of these oysters are that they tend to have lighter disease infection levels due to their fast grow out in the aquaculture setting, to live longer, to produce more larvae than the remnant native population, and most importantly, to quickly begin to colonize the Chesapeake Bay with more robust native oysters with some disease resistance. Many stakeholders questioned this strategy, especially the proposed use of cultchless broodstock oysters. These stakeholders believed that such oysters are especially vulnerable to predators and that most, even all, of these oysters would quickly be eaten by Chesapeake Bay predators.


Due to these questions, the Norfolk District Oyster restoration team conducted a planning pilot study in the Elizabeth River, which is right in front of the district office. Based on the best scientific information available, the team hypothesized that a broodstock oyster of 40 mm or larger would suffer little predation.

The team’s results support the hypothesis that the 40 mm broodstock oysters experience little predation, as survival rate after several months of monitoring is over 85 percent. The team tested larger (60 mm) oysters and found no significant difference in survival rates; on the other hand, smaller oysters experienced high mortality rates. The 30 mm size oysters suffered over 50 percent mortality, and 15 mm size oysters suffered over 90 percent mortality. Tests of applying a thin (50mm) layer of shell on top of the oysters showed that light shelling provides some protection to the smaller oysters tested, as 15 mm oysters suffered 60 percent mortality, which is significantly better than the unprotected oysters. Through this pilot study the team gained much-needed information that will set conditions for success as we move forward with the Chesapeake Bay oyster restoration project.

For more information, please contact [Dave Schulte](#) by email or call him at (757) 441-7007.

Instructions for Contributors to Planning Ahead

This newsletter is designed to improve the communication among all the planners and those we work with throughout the Corps. We hope that future editions will have mostly information and perspective from those of you on the front lines in the districts. We hope that these notes become a forum for you to share your experiences to help all of us learn from each other. We can't afford to reinvent the wheel in each office. We welcome your thoughts, questions, success stories, and bitter lessons so that we can share them on these pages. The articles should be short (2-3 paragraphs) except in some cases where you just have to say more.

- Use MS WORD
- Use "normal" style
- Use Times New Roman font, 11 point
- All text should be left justified with start of each paragraph indented by one tab stop.
- Each article should have short title with only initial letter of each word capitalized
- Following each title should be author's name and organization
- Last line should be contact information – phone number or e-mail address 

Subscribing to Planning Ahead

To subscribe or to our distribution list, send an e-mail message to majordomo@lst.usace.army.mil with no subject line and only a single line of text in the message body.

That single line of text should be: "subscribe ls-planningahead"

To obtain a 'help' file, send only the word 'help' in the text of the message (nothing in the subject line) and address it to majordomo@lst.usace.army.mil 

Submissions Deadline

The deadline for material for the next issue is 17 January 2003.

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<http://www.usace.army.mil/inet/functions/cw/cecwpl/news/news.htm>

The staff of *Planning Ahead* is Brad Fowler as editor, writer and chief bottle washer and Harry Kitch as publisher. Please continue to send in all those good articles and information to Brad. TEL 202-761-4231 or email kirby.b.fowler@usace.army.mil. Harry Kitch can be reached at TEL 202-761-4574 or e-mail Harry.E.Kitch@usace.army.mil. 